## In the claims:

## 1-49. (Presently Canceled)

50. (Previously Presented): A method for identifying a compound capable of modulating an endothelial cell activity comprising:

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- a) contacting an endothelial cell with a test compound; and
- b) assaying the ability of the test compound to modulate the expression of a GPCR 4941 nucleic acid or the activity of a GPCR 4941 polypeptide; thereby identifying a compound capable of modulating an endothelial cell activity.
- 51. (Presently Amended): The method of claim 50, wherein the [said] endothelial cell activity is selected from the group consisting of cell proliferation, cell migration or expression of cell surface adhesion molecules.

## 52-69. (Presently Canceled)

- 70. (Presently Presented): A method for identifying a compound which binds to a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:2, the method comprising:
- i) contacting the polypeptide, or a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
  - ii) detecting binding of the test compound to the polypeptide.
- 71. (Presently Presented): A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or a fragment thereof comprising at least 25 contiguous amino acids, the method comprising:
- i) contacting the polypeptide, or a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
  - ii) detecting binding of the test compound to the polypeptide.

72. (Presently Presented): The method of claim 70 wherein the polypeptide is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:3.

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- 73. (Presently Presented): The method of claim 71, wherein the polypeptide is encoded by the nucleotide sequence set forth in SEQ ID NO:1 or SEQ ID NO:3.
- 74. (Presently Presented): The method of any one of claims 70 or 71, wherein the polypeptide further includes heterologous sequences.
- 75. (Presently Presented): The method of claim 71, wherein the polypeptide has GPCR 4941 activity.
- 76. (Presently Presented): The method of any one of claims 70 or 71, wherein the cell is a mammalian cell.
- 77. (Presently Presented): The method of any one of claims 70 or 71, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:
  - a) direct detecting of test compound/polypeptide binding;
  - b) a competition binding assay;
  - c) an immunoassay;
  - d) a yeast two-hybrid assay; and
  - e) an assay for monitoring intracellular calcium, IP<sub>3</sub>, cAMP, or diacylglycerol concentration.
- 78. The method of any one of claims 70 or 71, wherein the detection is by an assay for an activity of the polypeptide.
- 79. The method of claim 78, wherein the activity is selected from the group consisting of endothelial cell activity or tumor cell activity.